bird whose disappearance, if civilization and cultivation should eventually ruthlessly cause its extinction, would be a lamentable loss to ornithology.

EXPLANATION OF PLATE XIII.

Heads of *Pelecanus thagus*.

Fig. 1. Female, Ofrenda Bay, Ancon. 21. x. 12.
Fig. 2. Male from Mid-Chincha Island. 29. xii. 12.
Fig. 3. Female from Lobos de Tierra Island. 23. vi. 12.
Fig. 4. Male from North Chincha Island. 2. i. 13.

XXIV.—*On a Peculiarity in the Nest of the Tasmanian Tit* (Acanthiza diemenensis). By H. Stuart Dove, M.R.A.O.U.

(Plate XIV.*)

John Burroughs, the veteran naturalist of North America, in his 'Ways of Nature,' has the following remarks concerning birds and their use of string as a nesting material:—"Who ever saw any of our common birds display any sense or judgment in the handling of strings? Strings are a comparatively new thing with birds; they are not a natural product, and, as a matter of course, birds blunder in handling them. The Oriole (*Icterus galbula*) uses them the most successfully, *often attaching her pensile nest to the branch* by *their aid*. But she uses them in a blind, childish way, winding them round and round the branch, often getting them looped over a twig or hopelessly tangled, and now and then hanging herself with them, as is the case with other birds.

"I have seen a photograph of an Oriole's nest that had a string carried round a branch apparently a foot or more away, and then brought back and the end woven into the nest. It was given as a sample of a well-guyed nest, the discoverer no doubt looking upon it as proof of an Oriole's forethought in providing against winds and storms. I have

* For explanation of the plate see p. 422.

seen an Oriole's nest with a string carried around a leaf, and another with a long looped string hanging free. All such cases simply show that the bird was not master of her material; the trailing string is caught over the leaf or branch, and both ends drawn in and fastened regardless of what happened. Twice I have seen Cedar-birds (*Ampelis cedrorum*) trying to carry away the strings which Orioles had attached to the branches: instead of making any effort to untie or unsnarl them in a human way, they simply tugged at them, bringing their weight to bear, and tried to fly away with the loose end."—Burroughs, 'Ways of Nature,' 1906, p. 246.

Since coming to my present residence, between the Mersey and Den Rivers, in north-west Tasmania, I have come across an instance in which a very considerable use of string has been made by the native Tit (*Acanthiza diemenensis*). There is a small Stringybark (*Eucalyptus obliqua*) growing near the back of the cottage, and from a horizontal branch of this tree depend some long pendulous branchlets, much after the style of the drooping White Gum branchlets (*Eucalyptus viminalis*) so plentiful on this coast. Amid the thick foliage of one of these branchlets, and about eight feet from the ground, was placed the nest in question, a small domed structure 4½ inches long by 3 inches across, with an opening near the top which will just comfortably admit one's forefinger. Dry grass and fine fibres are the principal materials employed, with here and there a spider's cocoon or dry leaf stuck on the exterior. But the remarkable point about the structure is the way in which string has been copiously employed, wound in and out among the other material, and even brought round from the back and drawn right across the front, so as to brace the nest in a masterly manner. There is no evidence here of a blind, unreasoning effort, a want of mastery over a new material; either birds have progressed in knowledge of the odds and ends of civilization, or our *Acanthiza* possesses sharper wits than the American *Icterus*. The string is even brought right through the back of the nest to the interior, so as to form

part of the lining, the remainder of the lining consisting of a soft woolly substance resembling cotton-wool.

But the ingenuity of our little architects was not yet exhausted. A long piece of fairly stout white string was given a turn over a slender twig, then three or four turns over a projection (which carried two seed-vessels) from the twig, then both ends were carried down and woven into the dome, so that the nest was actually swinging by the string from the branchlet above, although also receiving some slight support from leafy twigs underneath, to which it was not in any way attached.

While in the forests of East Gippsland, Victoria, a friend and myself obtained the nest of a Tit, probably the Striated (*Acanthiza lineata*), which was swung in the same way from a branchlet, but in this case was made from fine strips or shreds of Stringybark, and the loop by which it was suspended was of the same material. Dr. Ramsay says that it is usual for *A. lineata* to suspend its nest by the top to a thin twig at the end of some leafy bough, also that many of the nests are ornamented on the exterior with pieces of paper, bark, or green or white spider-cocoons. In the case of our Tasmanian Tit, noted above, it will be seen that there are certain similarities between that particular nest and those of the mainland *A. lineata*, viz., the suspension from a branchlet and the decoration with spider-cocoons. It is, however, from my experience, very unusual for the Tasmanian Tit to suspend its nest; I can recollect one other instance when I first came to the island, the finding of an *Acanthiza's* dwelling suspended to the underside of a dry drooping frond of the Fern Tree in Table Cape forests.

EXPLANATION OF PLATE XIV.

Nest of *Acanthiza diemenensis*.

Fig. 1. Front view. Bound with string and suspended by the same material from branchlet of Stringybark (*Eucalyptus obliqua*) at West Devonport, Tasmania.

Fig. 2. Back view, showing the string used in the structure.

1 NEST OF TASMANIAN TIT. 2

Photos M. Brown.